

Abstract

A data traffic policer includes a classifier for separating a packet stream in accordance with class, a first bucket for a first traffic class representing a first transmission rate and a first burst capacity and a plurality of second buckets for a plurality of second traffic classes representing a corresponding second transmission rates and a second burst capacities, the plurality of second buckets being nested within the first bucket thereby being subordinate to the rate and capacity of the first bucket, with the rate of the second bucket being disabled when a fill condition exists in the first bucket. The second bucket for a second traffic class may include a plurality of buckets for a corresponding plurality of traffic classes, with each bucket of the plurality of buckets having a corresponding capacity and rate. The rate defined as a corresponding weight.